

WHAT IS CLAIMED IS:

1. An optical head characterized by a light source formed of an indirect semiconductor laser, a lens for focusing a light beam from the light source onto a medium, and a detector for detecting a reflected light beam from the medium.
2. An optical head as set forth in claim 1, characterized in that the semiconductor laser has an active layer for emitting a light beam, and an indirect semiconductor is used for the active layer.
3. An optical head as set forth in claim 1, characterized in that the semiconductor laser has a quantum well structure for emitting a light beam, the quantum well structure comprises an active layer and a barrier layer, and an indirect semiconductor material is interposed between the active layer and the barrier layer.
4. An optical head characterized by a semiconductor laser having an active layer made of an indirect semiconductor mixed crystal material, and a detector for detecting a reflected light beam from a medium.
5. An optical head characterized by a recording laser, and a reproducing laser provided independent from the recording laser, the reproducing laser being an indirect semiconductor laser.
6. An optical head as set forth in claim 1, characterized in that the indirect semiconductor has an

10082314.022602

active layer structure, and has a quantum well structure.

7. An optical head as set forth in claim 1, characterized in that the indirect semiconductor has an active layer structure, and has an adjacent confinement structure.

8. An optical head as set forth in claim 4, characterized in that the material of the indirect semiconductor is of a AlGaP (aluminum, Gallium and phosphor) group.

9. An optical head as set forth in claim 8, characterized in that the half-width value of exciting current for causing laser oscillation is not less than 20 meV but not greater than 400 meV in the form of optical energy range.

10. An optical head as set forth in claim 8, characterized in that the half-width value of exciting current for causing laser oscillation is not less than 6 nm but not greater than 100 nm.

11. An optical head as set forth in claim 4, characterized in that the material of the indirect semiconductor is of an SiGe (silicon germanium) group.

12. An optical head as set forth in claim 11, characterized in that the half-value width of exciting current for causing laser oscillation emits an output light beam having a continuous spectrum which is not less than 20 meV but not greater than 150 meV in the form of optical energy range.

